



MATERIAL SAFETY DATA SHEET

The information contained herein is based on data available at the time of preparation of this data sheet and which The Glidden Company believes to be reliable. However, no warranty is expressed or implied regarding the accuracy of this data. The Glidden Company shall not be responsible for the use of this information, or of any product, method or apparatus mentioned and you must make your own determination of its suitability and completeness for your own use, for the protection of the environment, and the health and safety of your employees and users of this material.

Complies with OSHA hazard communication standard 29CFR1910.1200.

5546 HMIS Rating	
Health	2
Flammability	2
Reactivity	0

All Others HMIS Rating	
Health	2
Flammability	3
Reactivity	0

Prepared
November, 1987

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Emergency Telephone No.
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GLID-GUARD® Silicone Hi-Temp No. 5542; GLID-GUARD® Heat-Resistant Silicone Coatings No. 5544 Series; GLID-GUARD® Heat-Resistant Silicone Copolymer Enamel No. 5548

FIRE & EXPLOSION HAZARD DATA

DOT Proper Shipping Name: Paint, UN 1263

Hazard Class: Flammable Liquid, except 5546 is Combustible Liquid

Extinguishing Media: Dry chemical or foam

Unusual Fire and Explosion Hazards: Closed containers may explode when exposed to extreme heat or fire. Vapors can form explosive mixtures in air at elevated temperatures. May decompose under fire conditions emitting irritant and/or toxic gases.

Special Fire Fighting Procedures: Water may be used to cool and protect exposed containers.

HEALTH HAZARD DATA

Primary Route(s) of Exposure: Inhalation
Skin Contact

Effects of Overexposure:

Inhalation: Irritation of respiratory tract. Prolonged inhalation may lead to fatigue, drowsiness, dizziness and/or lightheadedness, headache, uncoordination, nausea, vomiting, coughing, mental apathy, central nervous system depression, respiratory problems, intoxication, confusion, anesthetic effect or narcosis, difficulty of breathing.

Skin Contact: Irritation of skin. Prolonged or repeated contact can cause dermatitis, defatting.

Eye Contact: Irritation of eyes. Prolonged or repeated contact can cause blurred vision, tearing of eyes, redness of eyes, severe eye irritation.

Ingestion: Amounts ingested incidental to consumer and industrial handling are not likely to cause injury; however, ingestion of larger amounts may cause lung inflammation and damage due to aspiration of material into lungs.

Notice: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

Emergency and First Aid Procedures:

Inhalation: Remove to fresh air. Restore and support continued breathing. Get emergency medical attention. Have trained person give oxygen if necessary. Get medical help for any breathing difficulty.

Skin Contact: Wash off quickly with plenty of water, then soap and water; remove contaminated clothing. Wash contaminated clothing before reuse.

Eye Contact: Flush immediately with large amounts of water, especially under lids, for at least 15 minutes. Obtain emergency medical treatment.

Ingestion: If swallowed, obtain medical treatment immediately.

Medical Conditions Aggravated By Exposure: This product is not expected to aggravate existing medical conditions; however, ingredients contained in this product have been reported to aggravate preexisting eye, skin, respiratory disorders, lung disorders, asthma-like conditions, cardiac abnormalities, kidney disorders, liver disorders, nervous system disorders.

Supplemental Health Information: Exposure to materials in this product have been associated with possible cardiac abnormalities, blood abnormalities, liver damage, kidney damage. Excessive inhalation of solvent vapors under uncontrolled conditions may lead to unconsciousness, respiratory failure, asphyxiation, and even death.

REACTIVITY DATA

Stability: Stable

Incompatibility: Oxidizers
Acids
Bases
Amines

Conditions to Avoid: Elevated temperatures
Contact with oxidizing agent

Hazardous Decomposition Products: Carbon Monoxide
Carbon Dioxide

Hazardous Polymerization: Will not occur

SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled: Comply with all applicable health and environmental regulations.

Eliminate all sources of ignition.

Ventilate area with explosion proof equipment.

Spills may be collected with non-combustible absorbent materials.

Waste Disposal: Dispose in accordance with all applicable regulations. Avoid discharge to natural waters.

SPECIAL PROTECTION INFORMATION

Respiratory Protection: Control environmental concentrations below applicable standards. Where respiratory protection is required, use only NIOSH/MSHA approved respirators in accordance with OSHA Standard 29 CFR 1910.134.

Ventilation: Provide dilution ventilation or local exhaust to prevent build-up of vapors.

Personal Protective Equipment: Eye Wash
Safety Shower
Safety Glasses or Goggles
Impervious Gloves

SPECIAL PRECAUTIONS

Handling and Storage: Store below 80°F, except 5546 store below 100°F. Keep away from heat, sparks, and open flame.

Other Precautions: Use only with adequate ventilation. Do not take internally. Keep out of reach of children. Avoid contact with skin and eyes, and breathing of vapors. Wash hands thoroughly after handling, especially before eating or smoking. Keep containers tightly closed and upright when not in use. Empty containers may contain hazardous residues. If sanding is done, wear a dust mask to avoid breathing of sanding dust. Ground equipment when transferring to prevent accumulation of static charge.

N2-HIGH TEMP.-RESISTANT COATINGS

5542, 5544, 5545,
5546, 5547, 5548

N2

CHEMICAL NAME/COMMON NAME	CAS. NO.	ACGIH-TLV		OSHA-PEL 8-HOUR TWA	LEL	V.P.
		8-HOUR TWA	STEL			
2-Butanone/Methyl Ethyl Ketone	78-93-3	200 ppm	300 ppm	200 ppm	1.4	70 @ 68°F
Hydrocarbon Solvent/Mineral Spirits	64742-47-8	100 ppm §	Not Established	500 ppm §	0.7	2 @ 68°F
Toluene/Toluene	108-88-3	100 ppm	150 ppm	200 ppm ▲	1.2	22 @ 68°F
Xylene/Xylene	1330-20-7	100 ppm	150 ppm	100 ppm	1.0	5.1 @ 68°F
Hydrocarbon Solvent/Aromatic Solvent Blend	64742-95-6	100 ppm §	Not Established	500 ppm §	1.0	10 @ 68°F
Ethylene Glycol Monobutyl Ether/ Ethylene Glycol Monobutyl Ether	111-76-2	Skin 25 ppm	Not Established	Skin 50 ppm	1.1	1 @ 68°F
1-Methoxy-2 Propyl Acetate/ Propylene Glycol Monomethyl Ether Acetate	108-65-6	Not Established	Not Established	Not Established	N.A.	2.4 @ 68°F
2-Methylpropyl 2-Methyl Propanoate/ Isobutyl Isobutyrate	97-85-8	Not Established	Not Established	Not Established	1.0	3.2 @ 68°F
Aliphatic Petroleum Solvent/VM&P Naphtha	64742-89-8	300 ppm ☆	Not Established	500 ppm ☆	0.9	30 @ 68°F
Graphite/Graphite	7782-42-5	2.5 mg/m³ ‡	Not Established	15 mppcf	N.A.	N.A.
Metal Oxide Silicate/Brown Iron Oxide	1309-37-1	0.1 mg/m³ ‡	Not Established	(10 mg/m³)/(%) SiO₂ + 2) ‡	N.A.	N.A.
Iron Oxide Silicate/Brown Iron Oxide	1309-37-1	0.1 mg/m³ ‡	Not Established	(10 mg/m³)/(%) SiO₂ + 2) ‡	N.A.	N.A.
Yellow Iron Oxide/Yellow Iron Oxide	51274-00-1	10 mg/m³	Not Established	15 mg/m³	N.A.	N.A.
Ceramic Black/Ceramic Black	Supplier Confidential	Not Established	Not Established	Not Established	N.A.	N.A.
Carbon Black/Carbon Black	1333-86-4	3.5 mg/m³	Not Established	3.5 mg/m³	N.A.	N.A.
Chromium Oxide/Chromium Green Oxide	1308-38-9	0.5 mg/m³ (as Cr)	Not Established	1 mg/m³	N.A.	N.A.
Titanium Dioxide/Titanium Dioxide	1317-80-2	10 mg/m³	Not Established	15 mg/m³	N.A.	N.A.
Calcium Carbonate/Ground Limestone	1317-65-3	10 mg/m³	Not Established	15 mg/m³	N.A.	N.A.
Silicon Dioxide, Amorphous/Silica, Amorphous	7631-86-9	10 mg/m³	Not Established	20 mppcf	N.A.	N.A.
Magnesium Silicate, Hydrate/Talc	14807-96-6	2 mg/m³ ‡	Not Established	20 mppcf	N.A.	N.A.
Silicon Dioxide/Crystalline Silica	7631-86-9	0.1 mg/m³ ‡	Not Established	(10 mg/m³)/(%) SiO₂ + 2) ‡	N.A.	N.A.
Potassium Aluminosilicate/Mica	12001-26-2	3 mg/m³ ‡	Not Established	20 mppcf	N.A.	N.A.
Zinc Oxide/Zinc Oxide	1314-13-2	10 mg/m³	Not Established	15 mg/m³	N.A.	N.A.
Barium Metaborate/Barium Metaborate	13701-59-2	10 mg/m³	Not Established	Not Established	N.A.	N.A.
Silicone Resin/Silicone Resin	Supplier Confidential	Not Established	Not Established	Not Established	N.A.	N.A.
Alkyd Resin/Alkyd Resin	Supplier Confidential	Not Established	Not Established	Not Established	N.A.	N.A.
Acrylic Resin/Acrylic Resin	Supplier Confidential	Not Established	Not Established	Not Established	N.A.	N.A.
Aluminum Powder/Aluminum Powder	7429-90-5	10 mg/m³	Not Established	Not Established	N.A.	N.A.

Carcinogenicity Listed By: NTP? No IARC Monograph? No OSHA Regulated? No

LEL—The lower explosive limit is the lowest concentration (% of volatiles in air) that will produce a flash of fire when an ignition source is present.

V.P.—Vapor pressure in millimeters of mercury at the indicated temperature.

mppcf—Millions of particles per cubic foot.

N.A.—Not applicable.

mg/m³—Milligrams per cubic meter.

ppm—Parts per million.

‡ Respirable Dust.

Skin—Additional exposure, over and above airborne exposure, may result from skin absorption.

§ As Stoddard solvent.

☆ As Petroleum Distillates.

Cr—Chromium

▲ Acceptable ceiling concentration—300 ppm

Acceptable maximum peak above the acceptance ceiling concentration for an 8-hour shift—500ppm/10 minutes

5544 SERIES, 5542, 5548

PRODUCT CODE NO.	5542	5548		5544	5545	5546	5547
Ingredients, Wt. %							
• 2-Butanone	16-21						
• Hydrocarbon Solvent	4-9			4-9		28-33	34-39
• Toluene	6-11	12-17		18-23	20-25	1-5	
• Xylene		32-37		8-13	15-20		
• Hydrocarbon Solvent				10-15	4-9		
• Ethylene Glycol Monobutyl Ether				1-5			
• 1-Methoxy-2-Propyl Acetate	14-19						
• 2-Methylpropyl 2-Methyl Propanoate	2-7						
• Aliphatic Petroleum Solvent	6-11	4-9		1-5	10-15		7-12
• Graphite		1-5					
• Metal Oxide Silicate						2-7	
• Iron Oxide Silicate						1-5	
• Yellow Iron Oxide						8-13	
• Ceramic Black		2-7					
• Carbon Black				1-5			
• Chromium Oxide				1-5			
• Titanium Dioxide				1-5	2-7	1-5	2-7
• Calcium Carbonate						10-15	
• Silicon Dioxide, Amorphous		1-5					
• Magnesium Silicate, Hydrate						4-9	
• Silicon Dioxide				10-15	1-5		
• Potassium Aluminosilicate		8-13		2-7	2-7		
• Zinc Oxide							1-5
• Barium Metaborate						4-9	
Silicone Resin	14-19	18-23		4-9	4-9	18-24	30-35
Alkyd Resin							8-13
Acrylic Resin	2-7			11-16	20-25		
• Aluminum Powder	10-15						
Physical Data							
% Volatile by Vol.	75.0	72.0		77.6	74.0	56.0	62.0
Wt. per Gallon, lbs.	8.1	9.4		9.5	8.6	11.0	8.0
Boiling Range, °F	172-374	231-293		231-374	231-355	231-374	249-374
Flash Point, °F (Seta)	24	45		60	63	105	90
Lower Explosive Limit	0.7	0.9		0.7	0.9	0.7	0.7

• Hazardous Ingredients as defined by OSHA, ACGIH or The Glidden Company.